

100061739

Perpustakaan Sultanah Nur Zahirah (UMT) Universiti Malaysia Terengganu



1100061739

UMT WIR CV

Preliminary study on some, aspect on habitat and biological of the leech, Hirudinaria manillensis / Tengku Nur Raihan Tengku Ngah.

PERPUSTA UNIVERSE	 SIA TER	DIGG	(THU) (UNIT)
T	106	- Pa	39

1:0	COGL	739	
 and y	UUUT		
		-	
 	and the second second		
	ń.		
 			-
		_	
 -			
 			the second second second
1			
		1	
1			
			Lihat sebela

PERPUSTAKAAN SULTANAH NUR ZADIRAH UNT

PRELIMINARY STUDY ON SOME ASPECT ON HABITAT AND BIOLOGICAL OF THE LEECH, *Hirudinaria manillensis*.

TENGKU NUR RAIHAN BINTI TENGKU NGAH

This research report is submitted in partial fulfillment of the requirement of the degree of Bachelor of Applied Science (Fisheries)

FACULTY OF AGROTECHNOLOGY AND FOOD SCIENCE UNIVERSITI MALAYSIA TERENGGANU

2007

This project report should be cited as:

Raihan, T.N. 2007. Preliminary study on some aspect on habitat and biological of the leech (*Hirudinaria Manillensis*). Undergraduate thesis. Bachelor of Applied Science (Fisheries), Faculty of Agrotechnology and Food Science, Universiti Malaysia Terengganu. 40 pg

No part of this project may be reproduced by any mechanical, photographic, or electronic process, or in the form of phonographic recording, nor may it be stored in a retrieval system, transmitted, or otherwise copied for public or private use, without written permission from the author and the supervisor of the project.

TABLE OF CONTENTS

	PAGE
ACKNOWLEDGEMENTS	ii
ABSTRACT	iii
ABSTRAK	iv
LIST OF FIGURES	v
LIST OF APPENDICES	vi
ABBREVIATIONS	vii

CHAPTER

3.0

4.0

5.0

6.0

1.0 **INTRODUCTION**

1.1 Objectives	2
----------------	---

LITERATURE REVIEW 2.0

	2.1 Taxonomy	3
	2.2 Leech Taxonomy	4
	2.3 Leech Habitat	5
	2.4 Leech Morphology	6
	2.5 Reproductive System	7
	2.6 Leech Feeding	8
	2.7 Significant of Leech	9
3.0	METHODOLOGY	10
4.0	RESULTS	14
5.0	DISCUSSIONS	27
6.0	CONCLUSION	29
REF	ERENCES	31
APPENDICES		
CURRICULAR VITAE		

ACKNOWLEDGEMENTS

I would like to take this golden opportunity to express my sincere gratitude and appreciation to my dearest supervisor, Prof. Madya. Dr. Anuar Hassan for his continuous comments, guidance and patience throughout this research.

I would also like to thank all the Fisheries Department staffs which involved in this research directly or indirectly. Not forgetting the Anatomy and Physiology Laboratory assistants that lend their helping hand too. Also to Dr Zaleha Kassim, thanks so much for lend me your helping hand. I really appreciate it.

I wish to thank my lovely parents for their support and loving encouragements, as well as the tower of strength in my hour of need.

Last but not least, I express my special gratitude to Enny Sharina, Intan Faraha and Syam, thanks for assisted me during the ups and downs in completing this research.

ABSTRACT

This study was carried out to determine habitat, morphology and internal anatomy of the leech. Leeches most abundance can be found when pH is 5.7 -6.3. No available leeches are found when pH below 5.0. In middle paddy fields, there are no leeches because most of the leech rest near the shore to wait for prey before sucking the blood. Leeches are prefers to live in no moving current and suitable substrates likes plant are important for the leech to reproduction and movement. For morphology of the leech, the body are dorso-ventrally flattened, have 34 segments, 3 pair of eyes and two sucking disks at the end of the anterior and posterior. Hirudinaria manillensis has 4 yellow stripes at the dorsal and contains three set of jaws to make Y shape incision. The underside of the leech is typically lighter in color than the backside. Anus of the leech can be found on the midline to the edge of the posterior sucker. For reproduction, three part life cycle of the leeches are egg, larva and adult. Before the egg hatched, mucus has been produced at the substrates with the cocoon. Leeches are blood suckers invertebrates that using anterior sucker to suck the blood from the prey. Feeding lasts about 40-120 minutes and will drop after leeches were fulled. Leeches move by either an undulating up and down motion or like crawling motion using the anterior and posterior suckers.